

Industrial Competition and Consolidation:  
The Telecom Marketplace Nine Years After the Telecom Act

Oversight Hearing Before  
The House Committee on the Judiciary  
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Testimony of Michael Kellogg

Mr. Chairman and Members of the Committee. My name is Michael Kellogg. I am a partner at the law firm of Kellogg, Huber, Hansen, Todd, Evans & Figel, P.L.L.C. I am appearing today on behalf of the United States Telecom Association.

For more than a century, the telecommunications networks and services in this country were the envy of the world. We had the fastest, cheapest, most advanced technology and an infrastructure that reached into just about every home and business in the nation. No other country could boast comparable levels of service and technology.

As a result, our telecom industry has long been a critical engine for domestic economic growth. The telecom sector standing alone accounts for nearly 3 percent of the U.S. GDP – more than any other high-tech industry.<sup>1</sup> The existing infrastructure reflects literally trillions of dollars in invested capital. At its peak in the year 2000, the sector as a

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<sup>1</sup> Industry Analysis & Technology Division, Wireline Competition Bureau, FCC, *Telecommunications Industry Revenues 2002* at Table 1 (Mar. 2004); Bureau of Economic Analysis, *Current-Dollar and “Real” Gross Domestic Product*, <http://www.bea.gov/bea/dn/gdplev.xls> (GDP for 2002). According to an October 2000 news article, for example, the personal computer industry earned \$180 billion in revenue. D. Bartholomew, *E-Business Commentary – PC Industry Stuck in Neutral*, IndustryWeek.com (Oct. 1, 2002), <http://www.industryweek.com/CurrentArticles/ASP/articles.asp?ArticleId=1330>.

whole was investing about \$110 billion per year, and thus accounted for about 10 percent of all annual capital spending in the United States.<sup>2</sup>

Through its impact on productivity, moreover, the telecom sector's capital investment boosts economic output across the board. The Bureau of Economic Analysis estimates that each dollar invested in U.S. telecom infrastructure has resulted in nearly three dollars of economic output.<sup>3</sup> That multiplier is likely to get larger as low-cost broadband service becomes more widely available.

The telecom sector has had a commensurately large impact on employment. In the year 2002, it employed almost 1.2 million workers.<sup>4</sup> Employment in the telecom sector as a whole grew more than twice as fast as the national average between 1998 and 2000, and, by the year 2000, the telecom sector was paying nearly twice the average U.S. salary.<sup>5</sup>

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<sup>2</sup> United States Census Bureau, *Annual Capital Expenditures: 2001* at 10-11 (Jan. 2003).

<sup>3</sup> Bureau of Economic Analysis, *Input-Output Accounts Data: 1999 Annual I-O Table Two Digit* at Table IOTotReqIxCSum.xls, <http://www.bea.doc.gov/bea/dn2/i-o.htm#annual>.

<sup>4</sup> Bureau of Labor Statistics, U.S. Dep't of Labor, *Career Guide To Industries: Telecommunications*, <http://www.bls.gov/oco/cg/cgs020.htm>. As of end of year 2000, a total of 5.6 million workers were involved in IT occupations – nearly 5 percent of all U.S. workers. Economics and Statistics Administration, Dep't of Commerce, *Digital Economy 2002* at 42-44 (Feb. 2002).

<sup>5</sup> United States Census Bureau, *Statistics of U.S. Businesses: Tabulations by Enterprise Size, Number of Firms, Number of Establishments, Employment, and Annual Payroll by Employment Size of the Enterprise for the United States, All Industries – 1998*, <http://www.census.gov/csd/susb/usalli98.xls>; United States Census Bureau, *Statistics of U.S. Businesses: Tabulations by Enterprise Size, Number of Firms, Number of Establishments, Employment, and Annual Payroll by Employment Size of the Enterprise for the United States, All Industries – 2000*, <http://www.census.gov/csd/susb/usalli00.xls>.

As we all know, that situation has changed dramatically. We are currently in a period of “creative destruction” that is transforming the industry. Since 2000, telecommunications service providers and the equipment manufacturers that supply them have lost over 700,000 jobs<sup>6</sup> and over \$2 trillion in market capitalization,<sup>7</sup> while annual investment declined by more than \$70 billion<sup>8</sup> and the United States fell to 11th in the world in deployment of advanced broadband networks.<sup>9</sup>

These developments are attributable to two main factors: first, mistakes by the FCC in its implementation of the 1996 Telecom Act and, second, the growth of new technologies have advanced at a rapid pace to compete with and displace traditional telecommunications services. The first factor has to some extent been corrected by the Courts and by changes in FCC policies that are now more pro-competitive; but there is still progress to be made to eliminate anti-growth policies that have stifled investment in

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<sup>6</sup> See *Layoffs Near 2 Million in 2001*, San Jose Bus. J. (Jan. 3, 2002) <http://sanjose.bizjournals.com/sanjose/stories/2001/12/31/daily23.html>; V. Godinez, *Tech Posts Are Out There, If You Do a Little Looking*, Seattle Times (Feb. 2, 2003); *December Job Cuts Top 100K*, CNN/Money.com (Jan. 5, 2005), [http://money.cnn.com/2005/01/05/news/economy/jobs\\_challenger/](http://money.cnn.com/2005/01/05/news/economy/jobs_challenger/).

<sup>7</sup> See S. Rosenbush, *et al.*, *When Will the Telecom Depression End?*, Business Week at 66 (Oct. 7, 2002).

<sup>8</sup> See Skyline Marketing Group, *CapEx Report: 2002 Annual Report*, Carrier Data Sheet 1 (June 2003) (overall investment by wireline and wireless carriers in 2000: \$126 billion); Skyline Marketing Group, *CapEx Report: 3Q04*, Carrier Data Sheet 1 (Feb. 2005) (2004 est. based on data through 3Q 2004: \$51 billion).

<sup>9</sup> See, e.g., G. Arlen, ed., *TR's Online Census* at 11 (Fourth Quarter 2003) (“The United States ranks 11th worldwide in broadband use, according to a recent United Nations report.”). See also FCC Chairman Michael K. Powell, Remarks at the National Association of Regulatory Commissioners General Assembly (Mar. 10, 2004) (“The greatest nation on earth should not be content to be 11th in broadband deployment.”).

recent years. The second factor will make this industry more competitive and vibrant than ever, provided that current de-regulatory policies are continued and expanded.

Let me begin with the first point. In order to jumpstart competition in local telephone services, Congress decided not simply to eliminate existing franchises and open up markets; Congress went further and required incumbents affirmatively to assist new entrants through the mechanism of unbundling incumbent facilities. Whatever the merits of that idea, the FCC responded with a form of heavily managed competition more suitable to the old Soviet Union than to the new frontier of technology and innovation here in the United States.

Congress wanted unbundling as a temporary crutch upon which new entrants could rely while getting on their feet and building their own networks. The FCC turned it into a cradle-to-grave welfare system for bogus business models. As a result the FCC's unbundling rules led to a quick boom as hundreds of new entrants flooded the market. But it then led to an even quicker and deeper bust when markets finally realized that the FCC was promoting forms of competition that were untenable.

The focus of unbundling regulation was on creating hundreds of new competitors as quickly as possible. At the height of the competitive local exchange carrier ("CLEC") industry in 2001, ALTS – the CLEC trade organization – reported that there were more than 200 competing providers. Although these carriers invested nearly \$100 billion, much of this investment proved wasteful: there were as many as 50-60 competitive providers in some metropolitan areas.

Moreover, very little investment was made in residential markets, due to the availability of the ultra-cheap resale, known as the UNE platform ("UNE-P"). While the

traditional long-distance carriers were at one time viewed as serious competitors of the local telephone companies, due to the UNE-P, all they ever did was resell local service.

The FCC's unbundling rules have now been thrown out three times in the Courts; once by the Supreme Court and twice by the D.C. Circuit. On all three occasions the Courts have chided the FCC for adopting an excessively regulatory model to implement what was supposed to be a deregulatory statute. The FCC's mismanagement on this issue must bear a fair share of the blame for the high-tech boom and bust of the late 1990s and early 2000s.

But that is all water under the bridge at this point. My desire today is not to criticize anyone for past mistakes, but to learn from those mistakes. The much more important point is thus the second one: the dramatic changes in technology and whether these new technologies will be allowed to flourish in a truly competitive marketplace.

We must recognize that the telecommunications industry is very different today than at the time Congress passed the 1996 Act. Indeed, circumstances have changed so drastically as to warrant Congress in revisiting and updating the current law.

In 1996, ordinary wireline voice calls still generated 90 percent of the telecom industry's total revenues, with wireless and data splitting the rest. Today, the split is about 40-60. In another four years it is expected to be 30-70.<sup>10</sup> Traditional wireline telephone service is under tremendous pressure, as it has been at no other time in our history.

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<sup>10</sup> See J. Halpern, Bernstein Research Call, *U.S. Telecom Update: Revising Earnings Forecasts, Raising AT&T Target Price, Maintaining Ratings* at Exhibit 1 (Dec. 17, 2004).

Three areas in particular – wireless, broadband, and the advent of Voice Over Internet Protocol (“VOIP”) – warrant discussion.

Wireless. The growth of wireless has exceeded even the most optimistic projections. The number of wireless subscribers has grown from about 35 million at the time the 1996 Act was enacted to more than 180 million today.<sup>11</sup> By contrast, there were approximately 180 million wireline access lines as of June 2004, and that number has been in decline since 2001.<sup>12</sup>

There is intense competition for wireless, with an average of 3-5 providers in virtually every geographic area.<sup>13</sup> An increasing share of wireless subscribers, moreover, are abandoning their wireline phones altogether. As of year-end 2004, approximately 11 million primary wireline access lines were displaced by wireless, and that number is expected to reach about 22 million by the end of 2008.<sup>14</sup> Approximately 3 million wireless subscribers are now giving up their wireline phones each year.<sup>15</sup> At least 14

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<sup>11</sup> See CTIA, *CTIA's Semi-Annual Wireless Industry Survey*, <http://files.ctia.org/pdf/CTIAYearend2004Survey.pdf>.

<sup>12</sup> See Industry Analysis & Technology Division, Wireline Competition Bureau, FCC, at Table 1 (Dec. 2004).

<sup>13</sup> See *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, Ninth Report ¶ 9, WT Docket No. 04-111, FCC 04-216 (rel. Sept. 28, 2004) (Ninety-seven percent of the total U.S. population have three or more operators offering mobile telephone service in the counties in which they live. Approximately 87 percent of the population have five or more operators offering mobile telephone service in the counties in which they live.).

<sup>14</sup> B. Bath, Lehman Brothers, *Final UNE-P Rules Positive for RBOCs* at Figure 2 (Dec. 10, 2004).

<sup>15</sup> See *id.* at 4 & Figure 2.

percent of U.S. consumers now use their wireless phone as their primary phone.<sup>16</sup> Even larger percentages of young consumers – which will make up the next generation of homeowners – are disconnecting their wireline service, which makes it likely that the rate of substitution will increase even further in the future.<sup>17</sup>

Wireless prices have fallen to the point where it is now considerably cheaper for many customers to use their wireless phone. Wireless prices have declined – by as much as 10 to 20 percent a year in recent years.<sup>18</sup> Wireless service packages include unlimited long distance calling, which has contributed to wireline traffic substitution and increasing average minutes of use among wireless carriers. As a *Wall Street Journal* article explained, “[t]hanks to unlimited night and weekend minutes . . . cellphone plans are the

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<sup>16</sup> C. Wheelock, In-Stat/MDR, *Cutting the Cord: Consumer Profiles and Carrier Strategies for Wireless Substitution* at 1 (Feb. 2004) (“14.4% of US consumers currently use a wireless phone as their primary phone”).

<sup>17</sup> See, e.g., Frank Louthan, Vice President, Equity Research, Raymond James, prepared witness testimony before the Subcommittee on Telecommunications and the Internet of the House Energy and Commerce Committee, Washington, DC (Feb. 4, 2004) (“We believe the roughly 9.6% of the population that are single between the ages of 20 and 34 are the most likely to disconnect their wireline phone for a wireless phone (with a significant proportion of this age group having already done so). As young consumers between 15 and 19 (another 6.6% of the U.S. population) become households, we believe these households could become prime wireless substitution candidates.”); A. Quinton, *et al.*, Merrill Lynch, *Telecom Services: Unraveling Revenues* at 5 (Nov. 20, 2003) (“[W]e believe that demographic trends favor wireless. . . . So, as the US population ages, more young people are likely to become wireless subscribers – and either displace the purchase of a wireline service with wireless or cut the cord on an existing line.”).

<sup>18</sup> See, e.g., *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, Ninth Report, Appendix A at Table 9, WT Docket No. 04-111, FCC 04-216 (rel. Sept. 28, 2004) (showing average revenue per minute declining every year since 1995 (1998: 21%; 1999: 23%; 2000: 20%; 2001: 30%; 2002: 9%; 2003: 13%)).

method of choice when it comes to long-distance calling from home.”<sup>19</sup> The Yankee Group estimates that wireless subscribers make 60 percent of their long-distance calls on their wireless phones.<sup>20</sup>

Wireless service quality has also improved dramatically. Consumers now report high levels of satisfaction with the quality of their wireless service. For example, a GAO survey found that 83 percent of wireless users were satisfied with the call quality of their cell phone, while only 9 percent were dissatisfied.<sup>21</sup> Analysts similarly report that “[c]ultural awareness and acceptance of wireless as an acceptable/preferred communication medium is growing.”<sup>22</sup>

The wireless story is one of unqualified success: competition is intense, output is increasing, and prices are falling. That is exactly what we should all want to see. And it has happened – I cannot stress this point enough – because the FCC has stayed out of the way. Wireless is a deregulated industry. Competition is untrammelled. And the results of that competition are plain for all to hear.

Broadband. Broadband, unfortunately, is a more complicated story. Although the 1996 Act promotes deregulation as the approach to spur broadband deployment, the FCC ignored this mandate for many years and imposed unbundling here too. The

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<sup>19</sup> W. Mossberg, *The Mossberg Solution: Turning Your Home Phone into a Cellphone – Call-Forwarding Devices Let You Use Cellular Service on a Traditional Phone*, Wall St. J. at D6 (Dec. 3, 2003).

<sup>20</sup> P. Marshall, *et al.*, The Yankee Group, *Divergent Approach to Fixed/Mobile Convergence* at 7 & Exhibit 4 (Nov. 2004).

<sup>21</sup> General Accounting Office, *FCC Should Include Call Quality in Its Annual Report on Competition in Mobile Phone Services* at 27, Report No. GAO-03-501 (Apr. 2003).

<sup>22</sup> S. Ellison, IDC, *U.S. Wireless Displacement of Wireline Access Lines Forecast and Analysis, 2003-2007* at Table 1 (Aug. 2003).

FCC's broadband unbundling policies created disincentives to investment that slowed the deployment of broadband. These policies were all the more misguided as they were imposed only on local telephone companies, not on cable companies that have been the leaders in broadband deployment from the outset by an almost two-to-one margin. As a result, the U.S. fell behind many of its main competitors (such as South Korea, Japan, Canada, and parts of Europe) in broadband deployment.

Only after the FCC eliminated these policies did broadband competition intensify. And the FCC's current Chairman, Kevin Martin, is strongly committed to a deregulatory broadband market. As a result, prices have dropped significantly and penetration has increased at record rates. But there is still a long way to go, both in rationalizing FCC policies and in preventing outdated state regulations from blocking or delaying new broadband services, such as IP video.

It is worth remembering that there was no broadband at all at the time of the 1996 Act. Today, DSL and cable modem service are available to more than 90 percent of U.S. homes,<sup>23</sup> and more than 25 percent of homes subscribe.<sup>24</sup> At the end of 2004, approximately 47 percent of all residential Internet connections were either provided over cable modem or DSL; analysts expect broadband to surpass dial-up subscribership this year.<sup>25</sup>

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<sup>23</sup> See, e.g., C. Moffett, *et al.*, Bernstein Research, *Broadband Update: Broadband Trends Towards Ubiquity* at 5 (Apr. 1, 2005) (estimating that DSL is available to approximately 79 percent of homes passed, while cable modem is available to approximately 96 percent of all cable subscribers).

<sup>24</sup> See C. Moffett, *et al.*, Bernstein Research Call, *Broadband Update: Broadband Trending Towards 100% of Internet Connections* at Exhibits 3 & 13 (Mar. 15, 2005).

<sup>25</sup> See C. Moffett, *et al.*, Bernstein Research, *Broadband Update: Broadband Trends Towards Ubiquity* at 2 (Apr. 1, 2005).

Broadband prices have dropped rapidly. Consumers are now able to purchase broadband services bundled with their cable television and/or phone services. As the Congressional Budget Office has observed, “current providers face the prospect of new broadband market entrants and other competitive pressures from converging telecommunications markets.”<sup>26</sup> These new broadband market entrants include companies providing Wi-Fi, WiMax, satellite technologies, fiber-to-the-home, and broadband over power lines.<sup>27</sup>

The market leader is cable modem service, which accounts for more than 61 percent of residential and small business customers receiving download speeds of 200 kbps or more in at least one direction, and 83 percent of customers that receive more than 200 kbps in both directions.<sup>28</sup> One analyst estimates that at the end of 2004, there were 21 million residential cable modem subscribers, but only 11 million residential DSL subscribers.<sup>29</sup> Simply put, local telephone companies are still secondary players for mass-market customers of broadband Internet access.

But with deregulation, that may change. In order to remain serious competitors in the 21st century, SBC, Verizon, BellSouth and other incumbent telephone companies have embarked on ambitious plans to spend billions of dollars to deploy fiber networks

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<sup>26</sup> Congressional Budget Office, *Does the Residential Broadband Market Need Fixing?* at 30 (Dec. 2003), <http://www.cbo.gov/ftpdocs/48xx/doc4868/12-03-Broadband.pdf>.

<sup>27</sup> See *Availability of Advanced Telecommunications Capability in the United States*, Fourth Report to Congress, 19 FCC Rcd 20540, 20547 (2004).

<sup>28</sup> See Industry Analysis & Technology Division, Wireline Competition Bureau, FCC, *High-Speed Services for Internet Access: Status as of June 30, 2004* at Tables 3 & 4 (Dec. 2004).

<sup>29</sup> See C. Moffett, *et al.*, Bernstein Research Call, *Broadband Update: Broadband Trending Towards 100% of Internet Connections* at Exhibit 13 (Mar. 15, 2005).

that are capable of providing video as well as a host of other new services. This is an unalloyed boon for consumers and for the U.S. economy generally, which depends so heavily on its critical information infrastructure.

VOIP. In just the last two years, VoIP has gone from barely a blip on the radar screen, to arguably the most significant competitive development in decades. All of the major cable operators have begun offering new voice-over-IP (“VoIP”) services over their networks, and by the end of this year will be offering service to more than 40 percent of U.S. households;<sup>30</sup> major cable operators like Time Warner Cable and Cablevision already make service available in all of their markets, while Comcast expects to reach that milestone by the end of next year.

Time Warner Cable is now adding 11,000 VoIP households *per week*.<sup>31</sup> Cablevision has been adding another 1,000 cable VoIP households *per day* in the New York metropolitan area.<sup>32</sup> Comcast expects to achieve 20 percent penetration within five years.<sup>33</sup> In addition, there are literally dozens of independent VoIP providers, such as

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<sup>30</sup> See J. Halpern, *et al.*, Bernstein Research, *Quarterly VoIP Monitor: How High Is Up for Cable VoIP?* at 4 & Exhibit 2 (Apr. 1, 2005).

<sup>31</sup> See also P. Grant, *Time Warner’s Phone Service Shows Cable’s Growing Clout*, Wall St. J. at B1 (Feb. 23, 2005).

<sup>32</sup> See R. Black, Blaylock & Partners, *4Q04 Wireline Preview – The Telecom Landscape Is Evolving, Tread Carefully* at 2 (Jan. 20, 2005).

<sup>33</sup> See Thomson StreetEvents, *CMCSA – Q4 2004 Comcast Corporation Earnings Conference Call*, Final Transcript at 7 (Feb. 3, 2005) (Comcast COO & President Steve Burke: “[W]hen you look at what Cox, and more recently Cablevision, and others have done in this business, we think the 20 percent penetration is very reasonable within a five-year time period.”).

Vonage, which serves more than 500,000 lines, and has been adding more than 15,000 lines per week.<sup>34</sup> Earlier this month, AOL launched its own VoIP service.<sup>35</sup>

These new VoIP providers have deployed voice services over broadband networks and IP backbones that offer many advanced features and functionalities – such as online call management, personal conferencing, and locate-me services.

All three of these developments – wireless, broadband, and VOIP – are unqualified goods for consumers and the U.S. economy. But they pose more complicated challenges for the incumbent wireline telephone companies. These companies are facing unprecedented competitive pressures. They must rapidly innovate to survive and they must do so at the time when market access to capital is highly constrained.

Technological transformations cannot be sustained and expanded without extraordinary further investments of capital. But the capital markets – burned in the tech boom – are acutely aware of the business risks inherent in traditional telecommunications firms. Constrained access to capital and increasing costs are the results. So, too, is a measure of industry consolidation.

It is important to remember that when wireless first began in the early 1980s, the FCC tried a policy of promoting hundreds of small competitors, and awarded licenses by lottery to companies that had no ability (or even intention) of providing competition. The FCC then put a cap on how much spectrum each carrier could own. More recently, the

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<sup>34</sup> Vonage Press Release, *Vonage Becomes First Broadband Telephony Provider To Activate Over 500,000 Lines* (Mar. 7, 2005).

<sup>35</sup> See AOL Press Release, *America Online Introduces AOL® Internet Phone Service* (Apr. 7, 2005).

FCC eliminated the spectrum cap and has permitted industry consolidation, while maintaining deregulatory policies. Wireless competition has thrived as a result.

As the experience in wireless and many other non-telecom industries shows, capital intensive industries like telecom, typically are characterized by a handful of major competitors. It is therefore fruitless for regulatory policy to focus on promoting an industry structure with a certain number of like competitors. As the past eight years show, the market is much better than regulators at determining the best industry structure.

The focus should instead be on ensuring that intermodal competitors have opportunities to flourish, as it is these types of competitors that are most likely to provide sustainable competition going forward. This is what happened in transportation, where trucks and planes emerged to compete with railroads.

The 1984 break-up of AT&T created an artificial regulatory divide between local and long distance service. That divide is completely obsolete today, as the wireless experience shows. Consumers buy buckets of minutes that they can use equally to call across the street or access the nation. AT&T and MCI cannot survive as independent companies. The hundreds of CLECs started in the wake of the 1996 Act cannot survive alone either, and they are joining forces and consolidating into much stronger, more vibrant competitors.

These are trends to be embraced, not resisted. Unless we learn from the past, we are doomed to repeat it. The time has come for regulators to get out of the way and let telecom markets once again become the engine of growth in our economy and the United States be the world leader in telecommunications throughout the 21<sup>st</sup> Century.

